SPECIAL ISSUE

SPRING 1990

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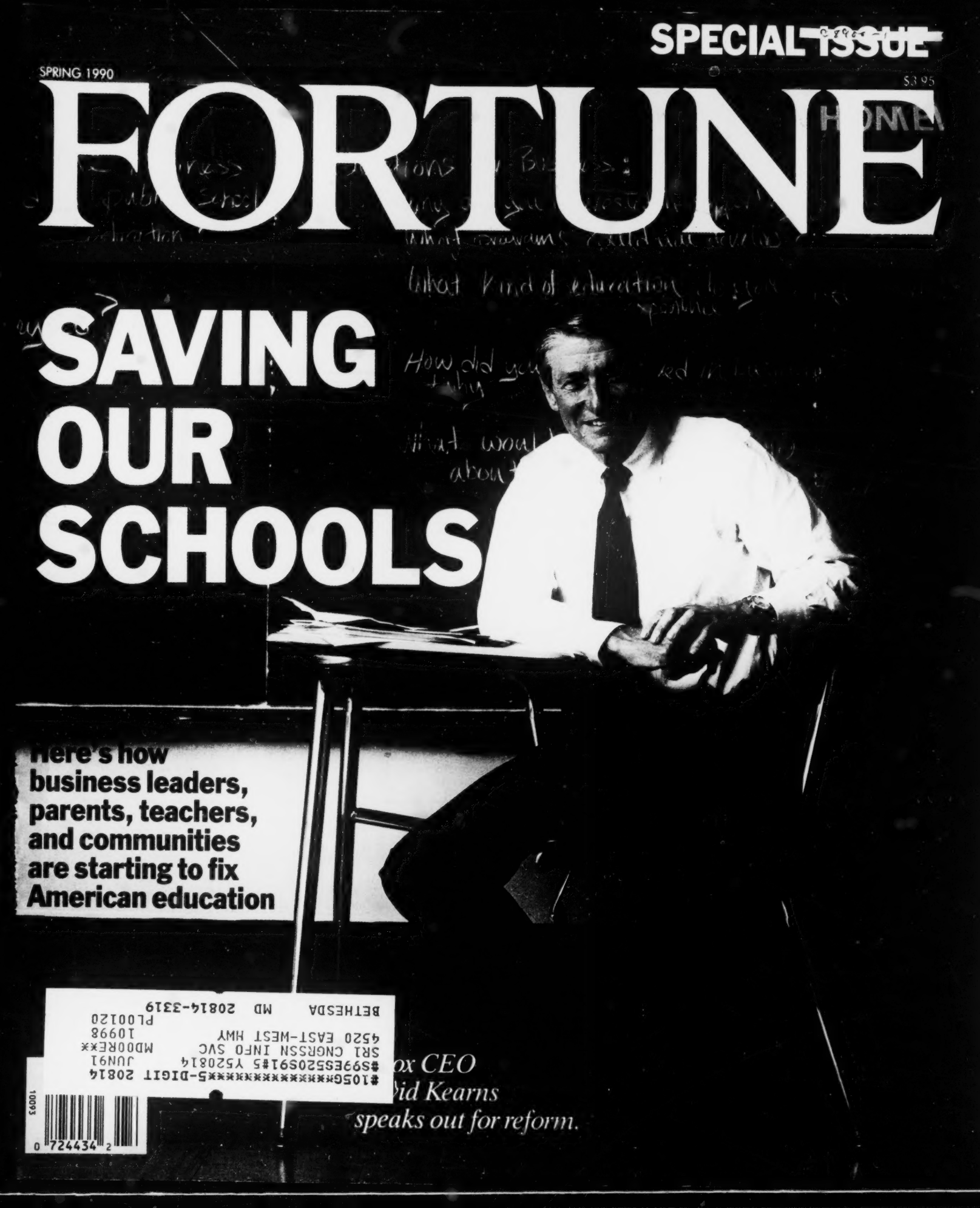
FORTUNE

SAVING OUR SCHOOLS



Here's how business leaders, parents, teachers, and communities are starting to fix American education

ox CEO
id Kearns
speaks out for reform.

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SPECIAL ISSUE

SPRING 1990

FORTUNE

ABOVE: Alan Levenson photographed Linda Linville in her 11th-grade history class at Centennial High School in Corona, California.

COVER: David T. Kearns, chairman and CEO of Xerox Corp., photographed by George Lange in a classroom at South Bronx High School in New York City.

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By working together, business leaders, parents, teachers, and communities can revitalize our most endangered institution. *by Ann M. Morrison*

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America may be failing to challenge its students the way other nations do. *by Alison L. Sprout*

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And VCRs and telecommunications systems too. Electronics makes learning relevant. It does not make teachers irrelevant. *by Nancy J. Perry*

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"Every child deserves the highest-quality education possible."
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The education team: (front row) Holt, Swan, Benziger, editor Morrison, Perry, Sprout, Kupfer; (middle row) Kuhn, Caminiti, Colvin, McCarthy; (rear) Dreyfuss, Frey, Fromson, and Dumaine

TO BORROW from that famous remark about the weather that Mark Twain really didn't make, everybody complains about education—but in this special issue of FORTUNE, we assume you *can* do something about it.* We think you'll agree that the articles are not a cry in the darkness but a few bright candles of hope for American public schools.

"It is remarkable how much is new," says assistant managing editor Ann Morrison, who supervised this issue and the writers and others pictured above who spent months producing it. "Experiments are going on all over, and many of them are working. There is a heightened awareness of the need for fundamental reform of the schools and a general agreement on the importance of preschool training, math and science education, and mentors."

Corporations are uniquely qualified to help, and have good reasons to lead in the struggle for reform. Their workers are too often the schools' failures. Business also has the money, management skills, and political influence to effect change. On page 93 you'll find a directory of precisely what 88 of them are doing.

FORTUNE is no tardy student of the relationship between schools and business. In our issue of July 4, 1988, Los Angeles bureau chief Nancy Perry wrote the first of our many stories about what business can do. We have since organized two national education summits, bringing together in Washington, D.C., hundreds of business executives, union leaders, educators, and government officials to examine what works and the ways we can speed the process of reform. So before you turn in your blue books in despair, read what we now have uncovered.

Marshall Loeb
MANAGING EDITOR

*The true originator of the weather joke: Hartford *Courant* editorialist Charles Dudley Warner.

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DO U.S. SCHOOLS MAKE THE GRADE?

THREE-FOURTHS of all American high school seniors are qualified, at least theoretically, to go on to college. Yet a study by the National Assessment of Educational Progress found that only 51% of 17-year-olds could adequately use fractions and decimals. Not surprisingly, students in Japan, Hong Kong, Britain, and Poland outperform their U.S. counterparts on high school chemistry and physics tests.

Why are American kids worldclass dunces? Perhaps because they devote too much time to watching television—the only area in which the U.S. leads the pack. Then again, the country may not be challenging its students enough. As Chester E. Finn Jr., a professor at Vanderbilt University, says, "At a time when European leaders are seriously considering requiring all secondary-school students to learn three languages, only 14% of our 11th-graders can write an adequate analytic piece in English."

On the plus side, the U.S. has a wide-open educational system, allowing all students the possibility of going to college. From a young age, students in Japan and Britain, for example, are placed on either a college-preparatory track or a vocational one.

Being at the top of the class requires sacrifice. In the Soviet Union, Japan, and parts of West Germany, children go to school on Saturdays and have at least a month less vacation than Americans. Full-time students in Japan and West Germany are strongly discouraged—and sometimes even prohibited—from taking part-time jobs. Most countries require far more homework than the U.S. does.

The most rigid regimen exists in Japan, where students serve lunch to their classmates and clean bathrooms and hallways. They aren't allowed to ride motorbikes to school or to smoke cigarettes, even after school hours. The Japanese "reward" for survivors of grueling high school courses and university placement exams? First, a closely supervised class trip to Tokyo or Hiroshima or, for the luckier ones, South Korea, Hong Kong, or China. Then, an easier life at the university.

–Alison L. Sprout

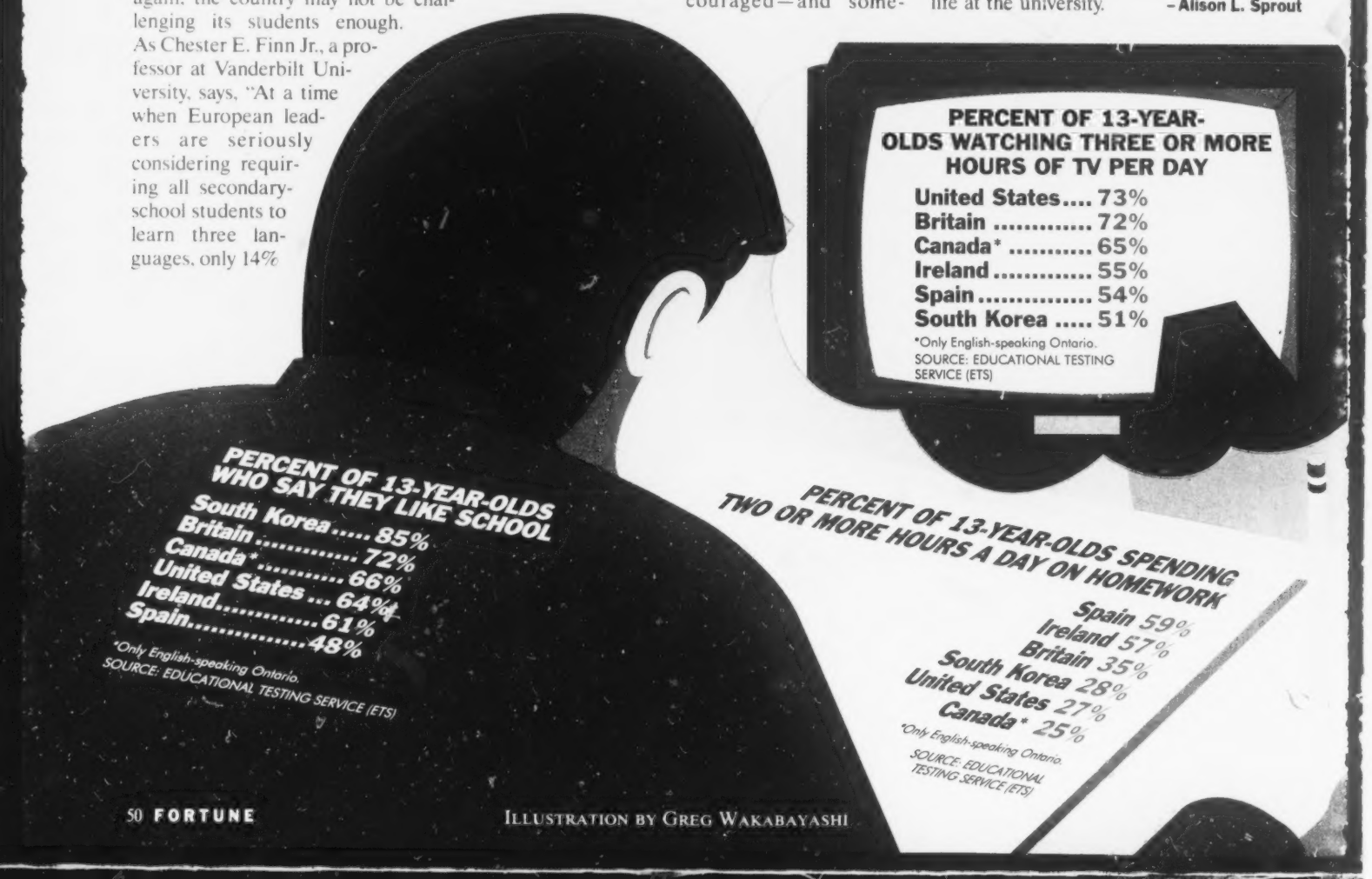

PERCENT OF 13-YEAR-OLDS WATCHING THREE OR MORE HOURS OF TV PER DAY
United States.... 73%
Britain 72%
Canada* 65%
Ireland 55%
Spain 54%
South Korea 51%
*Only English-speaking Ontario.
SOURCE: EDUCATIONAL TESTING SERVICE (ETS)
PERCENT OF 13-YEAR-OLDS WHO SAY THEY LIKE SCHOOL
South Korea 85%
Britain 72%
Canada* 66%
United States ... 64%
Ireland 61%
Spain 48%
*Only English-speaking Ontario.
SOURCE: EDUCATIONAL TESTING SERVICE (ETS)
PERCENT OF 13-YEAR-OLDS SPENDING TWO OR MORE HOURS A DAY ON HOMEWORK
Spain 59%
Ireland 57%
Britain 35%
South Korea 28%
United States 27%
Canada* 25%
*Only English-speaking Ontario.
SOURCE: EDUCATIONAL TESTING SERVICE (ETS)

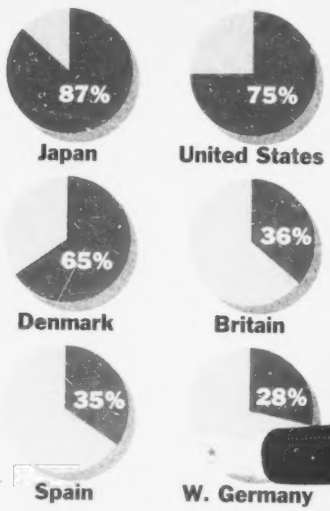
ILLUSTRATION BY GREG WAKABAYASHI

SPENDING ON EDUCATION AS A PERCENT OF GNP

Sweden	7.6%
Canada	7.4%
U.S.S.R.	7.0%
United States	5.6%
Britain	5.2%
Japan	5.1%
W. Germany	4.6%
Italy	4.0%

SOURCE: UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION (UNESCO)

PERCENT OF HIGH SCHOOL SENIORS ELIGIBLE FOR UNIVERSITY



SOURCE: ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD)

NUMBER OF DAYS IN THE SCHOOL YEAR

Japan	243
U.S.S.R.[1]	208
Hong Kong	195
Britain[2]	192
Canada[3]	186
United States	180

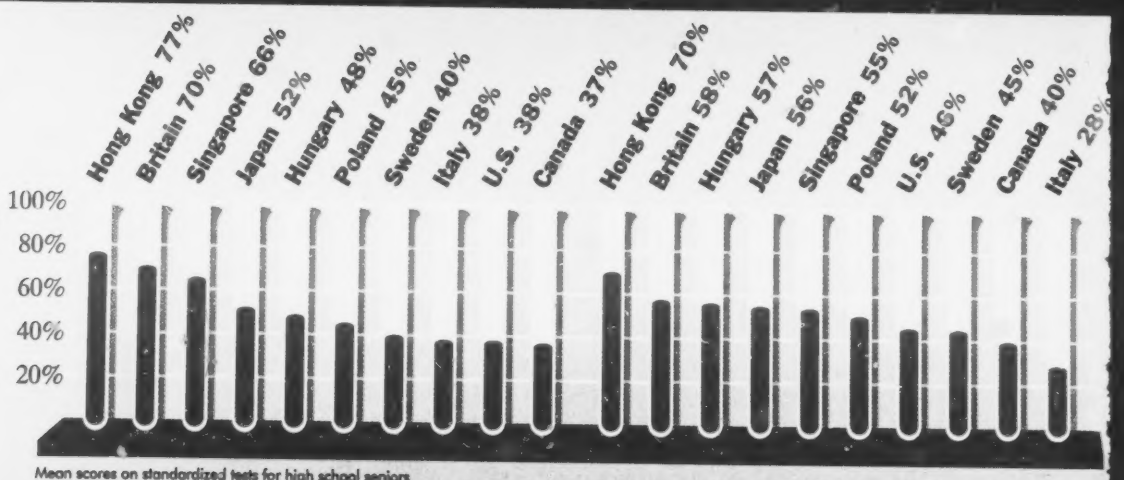
SOURCE: INTERNATIONAL ASSOCIATION FOR THE EVALUATION OF EDUCATIONAL ACHIEVEMENT (IEA)

[1] Source: Soviet journal, *Public Education*.

[2] England and Wales only.

[3] Ontario.

WHERE STUDENTS SCORE BEST ON SCIENCE TESTS



Mean scores on standardized tests for high school seniors

SOURCE: INTERNATIONAL ASSOCIATION FOR THE EVALUATION OF EDUCATIONAL ACHIEVEMENT (IEA)

HOW WASHINGTON CAN PITCH IN

George Bush wants to be Education President. He gets A for rhetoric; Incomplete for action. States must lead, but there's much for the Administration to do. ■ **By Ann Reilly Dowd**

By the year 2000, every child must start school ready to learn.

The United States must increase the high school graduation rate to no less than 90%.

In critical subjects, at the fourth, eighth, and 12th grades, we must assess our students' performance.

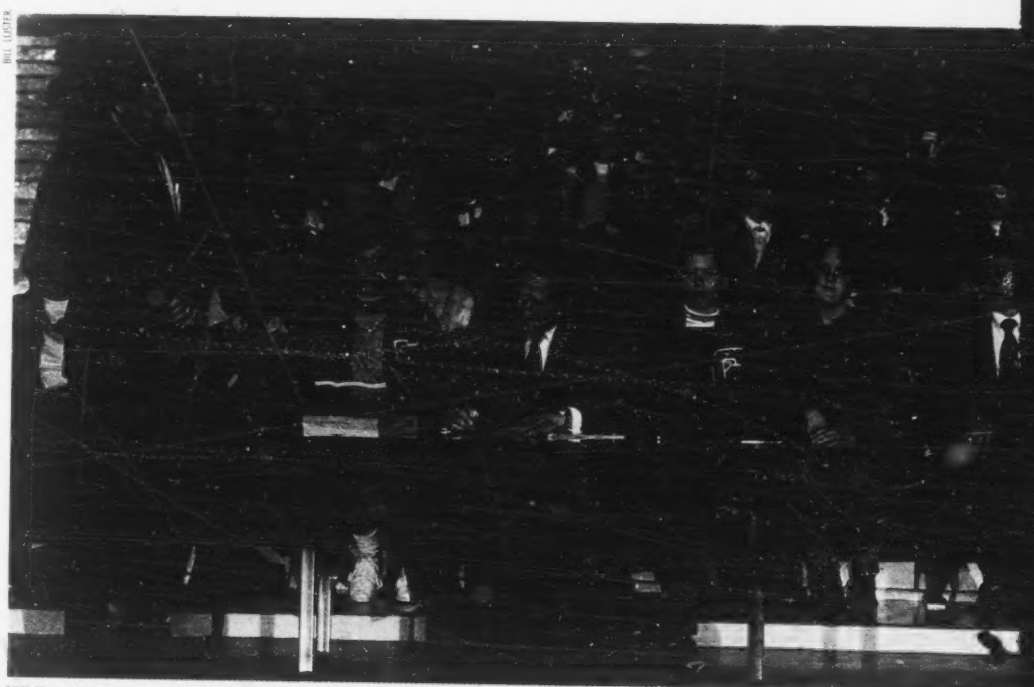
U.S. students must be the first in the world in math and science achievement.

Every American adult must be a skilled, literate worker and citizen.

Every school must offer the kind of disciplined environment that makes it possible for our kids to learn.

And every school must be drug free.

—President George Bush
"The State of the Union," January 31, 1990



BILL LUCHS

While students watch, Kentucky Governor Wilkinson signs a bill for a decentralized school system.

GREAT GOALS, Mr. President. Now it's time for you and the governors to get to work. By most measures the nation's education system is badly broken. Despite a doubling of spending in the 1980s, standardized test scores remain low, below those of our leading competitors. "We can't fix the system," says American Federation of Teachers President Albert Shanker with painful honesty. "We need radical change."

Nearly everyone agrees that states must take the lead. The Constitution omits any reference to education among federal powers, so the responsibility lies by implication with them. Along with local governments, states pay 86% of America's education bill. Moreover, the statehouse is closer to the problems—and the solutions. Says South Carolina Governor Carroll Campbell Jr., co-chairman of the National Governors' Association Education Task Force: "Communities need flexibility in dealing with their particular areas. Parents don't want the federal government running education."

Still, the President can focus public attention on the need for educational reform. George Bush already has earned an A for rhetoric by proclaiming goals, convening the first government-sponsored education summit, and honoring a teacher of the year. But to be worthy of the title Education President, he also needs to muster the resources of the executive branch to achieve results. On that score, he gets an Incomplete.

A President wise in the ways of Washington and committed to education reform would appoint a more dynamic Education Secretary than Lauro Cavazos, the first Hispanic president of Texas Tech University, who seems to have been picked more for ethnic balance than for his reformist zeal. Such a President would create a new Cabinet Council on Human Resource Development that pulled together the Secretaries of Education, Labor, Health and Human Services, Agriculture, and Treasury, plus the Budget Director, for an all-out drive toward educational excellence. He would also appoint a high-level adviser in the White House to push important initiatives through political roadblocks. But Bush has done none

REPORTER ASSOCIATE *Jennifer Reese*

Top teacher: Janis Gabay of San Diego

of these things. Says former Labor Secretary Ann McLaughlin: "Managing U.S.-Soviet relations alone won't keep America strong. We need a national commitment to lifelong learning."

Though Bush has shown no interest in major increases in federal spending to improve education, he should. An epidemic of social ills from drug abuse to homelessness continues to distract youngsters from the business of learning. Washington must attack these problems more aggressively and improve the delivery of social services to the needy. One way is to tie federal aid to states to the development of so-called one-stop service centers in or near schools where poor people can get food stamps, housing, job training, and other kinds of help all in one place.

The single most important thing President Bush can do is push for more money for existing federal programs that prepare poor children for school. The highly effective Head Start preschool program, for instance, reaches about a fifth of the poor children eligible for it. But the Head Start budget should plan for higher teacher salaries and better quality control—not just more students.

Washington should also spend more on programs that provide nutrition and health care for needy children. A good example is recent federal legislation financing comprehensive social service centers along the lines of Chicago's innovative Beethoven Project. Funded from public and private sources, Beethoven trains older women in public housing developments to visit expectant mothers and tell them about available prenatal care, family counseling, and other social services. The program also provides health care, nutrition, and preschool classes for neighborhood children.

THE PAYOFFS from such investments are enormous both for individuals and for society. The House Select Committee on Children, Youth, and Families reports that a dollar invested in prenatal care saves up to $3 in hospital costs alone. A dollar invested in preschool education saves as much as $6 in special education, welfare, crime, and lost productivity. Says Ernest Boyer, president of the Carnegie Foundation for the Advancement of Teaching: "Early intervention is powerfully in America's self-interest."

The Administration can use its regulatory muscle as an instrument of change. Federal aid to education is so narrowly structured that it can penalize performance. For instance, computers bought with "Chapter 1"

THE NATION'S REPORT CARD

	HIGH SCHOOL GRADUATION RATE, 1988 (rank)		SAT OR ACT SCORES,* 1989 (rank)		AVERAGE TEACHER SALARY, 1989 (rank)		PUPIL/ TEACHER RATIO, 1989 (rank)		EXPENDITURES PER PUPIL, 1988 (rank)		TEACHER SALARIES AS % OF TOTAL SCHOOL EXPENDITURES, 1988 (rank)		COMPETENCY TEST REQUIRED FOR GRADUATION
ALABAMA	74.9	(23)	17.9	(19)	$25,190	(37)	18.7	(43)	$2,718	(48)	48.4	(2)	YES
ALASKA	65.5	(43)	17.9	(19)	$41,693	(1)	17.0	(26)	$7,971	(1)	33.5	(51)	NO
ARIZONA	61.1	(48)	19.0	(12)	$28,684	(23)	18.2	(37)	$3,744	(34)	43.2	(22)	NO
ARKANSAS	77.2	(17)	17.6	(25)	$21,692	(50)	15.7	(15)	$2,989	(47)	46.6	(3)	YES
CALIFORNIA	65.9	(42)	906	(5)	$35,285	(5)	22.7	(50)	$3,840	(31)	38.7	(42)	YES
COLORADO	74.7	(24)	19.6	(5)	$29,558	(17)	17.8	(34)	$4,462	(16)	39.2	(38)	NO
CONNECTICUT	84.9	(7)	908	(4)	$37,339	(3)	13.1	(1)	$6,230	(4)	43.3	(20)	NO
DELAWARE	71.7	(32)	903	(8)	$31,605	(11)	16.4	(23)	$5,017	(11)	39.6	(37)	NO
FLORIDA	58.0	(51)	887	(15)	$26,648	(30)	17.1	(28)	$4,092	(25)	40.2	(34)	YES
GEORGIA	61.0	(49)	847	(19)	$28,038	(25)	18.5	(41)	$3,434	(39)	44.2	(14)	YES
HAWAII	69.1	(38)	888	(14)	$30,778	(15)	21.1	(49)	$3,919	(29)	37.6	(44)	YES
IDAHO	75.4	(22)	19.1	(9)	$22,860	(44)	20.6	(48)	$2,667	(49)	43.6	(16)	NO
ILLINOIS	75.6	(21)	18.8	(16)	$31,195	(13)	17.1	(28)	$4,369	(19)	45.0	(9)	NO
INDIANA	76.3	(19)	871	(18)	$28,664	(24)	17.8	(34)	$3,794	(32)	43.6	(16)	NO
IOWA	85.8	(5)	20.1	(1)	$25,884	(33)	15.8	(16)	$4,124	(24)	40.4	(32)	NO
KANSAS	80.2	(9)	19.1	(9)	$27,401	(27)	15.2	(12)	$4,076	(26)	44.2	(14)	NO
KENTUCKY	69.0	(39)	17.8	(22)	$24,920	(40)	17.8	(34)	$3,011	(46)	49.8	(1)	NO
LOUISIANA	61.4	(47)	17.1	(27)	$22,470	(45)	18.2	(37)	$3,138	(43)	40.0	(35)	YES
MAINE	74.4	(25)	897	(10)	$24,933	(39)	14.6	(7)	$4,258	(20)	40.7	(30)	NO
MARYLAND	74.1	(26)	914	(3)	$33,700	(8)	16.8	(25)	$5,201	(9)	40.4	(32)	YES
MASSACHUSETTS	70.0	(35)	905	(6)	$31,670	(10)	13.7	(5)	$5,471	(6)	44.4	(12)	NO
MICHIGAN	73.6	(29)	18.6	(18)	$34,419	(6)	19.8	(45)	$4,692	(15)	38.0	(43)	NO
MINNESOTA	90.9	(1)	19.7	(4)	$31,500	(12)	17.0	(26)	$4,386	(18)	42.9	(25)	NO
MISSISSIPPI	66.9	(40)	15.9	(28)	$22,036	(47)	18.4	(39)	$2,548	(50)	45.9	(4)	YES
MISSOURI	74.0	(28)	19	(12)	$25,981	(32)	15.9	(18)	$3,786	(33)	45.6	(5)	NO
MONTANA	87.3	(4)	19.8	(3)	$24,414	(41)	15.8	(16)	$4,246	(21)	38.8	(41)	NO

*SAT scores range from 400 to 1600, ACT scores from 1 to 36.

money for educationally disadvantaged children cannot be used at night to teach adults to read. And if a school succeeds in keeping more students from dropping out or failing, aid is reduced. The National Center on Education and the Economy, chaired by Apple Computer CEO John Sculley, has a sensible alternative: Allow states greater flexibility in the use of federal funds in exchange for adopting—and living by—ambitious student performance goals. Legislation along those lines introduced by Vermont Congressman Peter Smith deserves serious attention by Congress.

The federal government should play a more extensive role in educational research and development. While the Department of Education has established some measures of student achievement nationally, including the data below, it lacks the budget and in many cases the legal authority to gather information needed to compare countries, states, school districts, schools, or individual students. Education administrators, testing companies, and the Parent-Teacher Association—representing mostly teachers—have objected vehemently to some of the small steps Congress has taken to increase federal oversight. Educators object on grounds that accurate measures are not possible. But critics think they're mainly worried that comparisons will show how badly they're doing.

Some states are developing their own new measurements, but a coordinated approach demands federal leadership. A good beginning is New Mexico Senator Jeff Bingaman's national report card bill, which would set up a commission of experts to assess progress toward national goals, identify gaps in existing data, and make recommendations for improved testing.

FACT

The U.S. Army rejects 60,000 potential enlistees a year. They are not smart enough to serve.

Finally, Washington can spur innovation through well-designed pilot projects. The President has focused on the worthy goal of better teaching. His proposals include merit pay for excellent teachers and grants to states to improve math and science teaching and to develop alternative certification procedures.

But he has missed one enormous opportunity: the chance to lead the way to the classroom of the future by underwriting the development of interactive video software and training teachers in its use. Says California school superintendent Bill Honig, who has developed a new history video program with Lucasfilm, Apple Computer, and National Geographic: "Such investments can pay huge dividends." (See Technology.)

Many governors have

	HIGH SCHOOL GRADUATION RATE, 1988 (rank)		SAT OR ACT SCORES,* 1989 (rank)		AVERAGE TEACHER SALARY, 1989 (rank)		PUPIL/ TEACHER RATIO, 1989 (rank)		EXPENDITURES PER PUPIL, 1988 (rank)		TEACHER SALARIES AS % OF TOTAL SCHOOL EXPENDITURES, 1988 (rank)		COMPETENCY TEST REQUIRED FOR GRADUATION
NEBRASKA	85.4	(6)	19.6	(5)	$24,203	(42)	15.0	(10)	$3,943	(28)	41.0	(29)	YES
NEVADA	75.8	(20)	19	(12)	$28,840	(22)	20.3	(46)	$3,623	(36)	43.2	(22)	NO
NEW HAMPSHIRE	74.1	(26)	932	(1)	$26,703	(29)	16.2	(22)	$4,457	(17)	37.0	(46)	NO
NEW JERSEY	77.4	(15)	894	(12)	$32,923	(9)	13.6	(3)	$6,564	(3)	37.0	(46)	NO
NEW MEXICO	71.9	(31)	17.8	(22)	$25,205	(36)	18.5	(41)	$3,691	(35)	41.6	(28)	YES
NEW YORK	62.3	(46)	890	(13)	$36,500	(4)	14.9	(9)	$7,151	(2)	37.1	(45)	YES
NORTH CAROLINA	66.7	(41)	836	(22)	$25,650	(34)	17.5	(31)	$3,368	(41)	45.0	(9)	YES
NORTH DAKOTA	88.3	(2)	18.7	(17)	$22,249	(46)	15.4	(13)	$3,519	(38)	43.4	(19)	NO
OHIO	79.6	(10)	19.1	(9)	$29,152	(20)	17.6	(33)	$3,998	(27)	43.3	(20)	NO
OKLAHOMA	71.7	(32)	17.7	(24)	$22,000	(48)	16.5	(24)	$3,093	(44)	44.9	(11)	NO
OREGON	73.0	(30)	927	(2)	$29,500	(18)	18.4	(39)	$4,789	(13)	36.3	(50)	YES
PENNSYLVANIA	78.4	(14)	886	(16)	$30,720	(16)	15.9	(18)	$4,989	(12)	39.7	(36)	NO
RHODE ISLAND	69.8	(36)	895	(11)	$34,233	(7)	14.5	(6)	$5,329	(7)	45.5	(6)	NO
SOUTH CAROLINA	64.6	(45)	838	(21)	$25,060	(38)	17.2	(30)	$3,408	(40)	45.3	(7)	NO
SOUTH DAKOTA	79.6	(10)	19.4	(7)	$20,480	(51)	15.4	(13)	$3,249	(42)	41.9	(27)	NO
TENNESSEE	69.3	(37)	17.9	(19)	$25,619	(35)	19.3	(44)	$3,068	(45)	43.1	(24)	YES
TEXAS	65.3	(44)	877	(17)	$26,513	(31)	–	(—)	$3,608	(37)	44.3	(13)	YES
UTAH	79.4	(12)	18.9	(15)	$23,023	(43)	24.5	(51)	$2,454	(51)	40.7	(30)	NO
VERMONT	78.7	(13)	905	(6)	$26,861	(28)	13.6	(3)	$5,207	(8)	36.8	(48)	YES
VIRGINIA	71.6	(34)	902	(9)	$29,056	(21)	16.1	(21)	$4,149	(23)	43.6	(16)	YES
WASHINGTON	77.1	(18)	–	(—)	$29,176	(19)	20.4	(47)	$4,164	(22)	36.4	(49)	NO
WASHINGTON, D.C.	58.2	(50)	846	(20)	$37,504	(2)	13.3	(2)	$6,132	(5)	45.3	(7)	YES
WEST VIRGINIA	77.3	(16)	17.4	(26)	$21,904	(49)	15.1	(11)	$3,858	(30)	39.1	(39)	NO
WISCONSIN	84.9	(7)	20.1	(1)	$31,046	(14)	16.0	(20)	$4,747	(14)	42.6	(26)	NO
WYOMING	88.3	(2)	19.4	(7)	$27,685	(26)	14.6	(7)	$5,051	(10)	38.9	(40)	NO
AVERAGE	71.1		903/18.6		$29,567		17.4		$4,243		41.3		

*SAT scores range from 400 to 1600; ACT scores from 1 to 36.

been pushing reform long enough to understand what works and what doesn't. Strategies are beginning to change. Most early efforts focused on tough rules: tighter course requirements, higher teacher certification standards, and the like. But performance did not improve markedly. Now many states are concentrating on results. Says Chester Finn, assistant secretary of education in the Reagan Administration: "The shift from regulating means to regulating ends represents a historic change."

PAT DAWSON

Teenage mothers stay in class in Albuquerque's New Futures School.

THE FIRST STATE to move wholeheartedly in that direction was California. In 1983 the state's Democratic leaders launched a major drive to prepare youngsters for the new information-age job market and to function as citizens of a democracy. The goal-setting process involved educators, parents, community leaders, business, and labor. The state-financed program involved heavy investment in new technology and teacher development, and resulted in major changes in curriculum, textbooks, teaching methods, and testing. Schools were encouraged to seek waivers from any state regulations they felt got in the way of specific programs. The result: Despite a surge in enrollments—including many poor and bilingual children—eighth-graders' performance improved 25% in three years.

South Carolina followed a similar course with equally impressive results. In six years the state raised average scores on the Scholastic Aptitude Test 40 points, more than any other state. Fifteen other states have enacted such reforms, including Kentucky, which was forced to do so by the Kentucky Supreme Court. Because of the way Kentucky's schools were funded, among other problems, the court ruled that the whole system violated the state's constitution. Starting from scratch, the state has opted for a performance-based system that gives unprecedented freedom and responsibility to individual schools.

What lessons can be drawn from these pioneering efforts? First, successful reform requires cooperation among traditionally combative power centers. Responsibility must flow from the statehouse to the schoolhouse without loss of accountability. Business must get involved. School administrators and union leaders must share control with teachers, parents, and students.

It isn't easy. Says New Mexico Governor Garrey E. Carruthers, a Republican who just maneuvered a sweeping reform package through his Democratic legislature: "Make no mistake, it takes political leverage, good old-fashioned horse trading, and more money." To win support, Carruthers had to raise teachers' and administrators' salaries, fund after-school programs, and offer extra money to schools that restructured. The cost: $50 million a year more in revenues, raised through a 0.25% increase in gross-receipts taxes. His fellow Republicans howled, but the governor finally persuaded them with stiff accountability standards embedded in a report card bill. All 88 school districts must now report annually on how well their students do. Says Carruthers: "The key was accountability."

Many reform governors have found that accountability demands new measures of performance. Across America, most public schools rely on multiple-choice tests that measure a student's retention of facts but not the analytical skills that will be needed in the future. Critics say standardized tests discriminate against minorities and distort classroom instruction by putting too much emphasis on memorization.

To refocus students and teachers on creative thinking and teamwork, several states are experimenting with new forms of testing. Vermont plans to test fourth- and eighth-graders in writing and math using three methods: a uniform test, a portfolio of work developed over the course of the year, and a single piece chosen by the student.

In 1991, Connecticut will launch a new math and science assessment of high school students involving tasks that may take student teams as long as a semester to complete. A sample assignment: design, carry out, and report on an experiment to determine which food store in your community would save a family of four the most money over the course of a year.

ONCE STANDARDS are set, schools must be held to them. Minnesota, Nebraska, Iowa, Arkansas, and Ohio rely on consumers to provide discipline. In the most radical change in the history of U.S. public school education, these states allow parental choice—students can attend any public school in the state.

Eight other states intervene directly when schools don't make the grade. In the best systems the state first offers financial and managerial assistance. If that fails, the state takes over the school or shuts it down. One South Carolina elementary school was turned around when state officials introduced IBM's innovative Writing to Read computer program. In Jersey City, school administrators stuck with their methods even when the dropout rate topped 30%. Thomas Kean, who was then New Jersey's governor, threw out the recalcitrants and installed a new management team.

A way to win teachers' support is to free them of the regulatory strings that bind them like Gulliver lying on the beach. State boards of education often dictate what teachers teach and from what texts. States also control pay. Excellence is rarely rewarded: Pay is generally based on years served—or in some cases endured. Many teachers lack career ladders: a 30-year veteran does the same work as a new recruit.

Connecticut put teacher excellence at the center of its restructuring plan. The state has raised pay almost 40% since 1986 to an

average $37,339, and increased standards. New teachers serve under experienced mentors. Veterans have to take 90 hours of professional development every five years, at state expense.

NEW JERSEY eliminated its shortage of quality teachers through an alternative certification process launched by Kean. Applicants without traditional education degrees have to pass a test and agree to a year of supervision and after-hours training. Says Kean: "It means engineers from Bell Labs can teach computer science, jazz musicians can teach music, and former private-school teachers can work in the public schools. The profession is revitalized, and there's a great big teacher surplus." Twenty-seven states are following New Jersey's lead.

A number of states are also experimenting with financial incentives. Eight offer teachers and schools financial rewards for outstanding performance. In South Carolina the money can be used to buy instructional materials and computers or to train teachers. Last year 265 of the state's 1,100 schools won over $4 million in incentive money.

States also must be greater fiscal equalizers among school districts. The Congressional Research Service reports that during the 1986-87 school year, over half the states spent twice as much per pupil in some school districts as in others; a third spent three times; New York, eight times. The courts have already required ten states to implement more equitable financing formulas, and lawsuits have been filed in ten others.

Another key is higher student expectations and opportunities. That's what Minnesota Governor Rudy Perpich learned from his pioneering program that gives 11th- and 12th-graders a state stipend to attend classes at state colleges and universities. Says Perpich, who also started the nation's first statewide choice program: "A number of students drop out because they are bored. Of all our reforms, this one is doing the most for education."

Louisiana Governor Buddy Roemer learned the same lesson from a generous oilman. Two years ago Patrick F. Taylor offered to pay college tuition for 180 poor seventh- and eighth-graders—most of whom had repeated two or more grades—if they stayed out of trouble and graduated from high school with a B average. Today 150 are still in high school (19 moved, 11 were dismissed). On the precollege ACT test, half the tenth-graders scored at least 18, close to the national average. Inspired by Taylor's kids, Roemer pushed a bill through the legislature that puts state money behind a similar statewide program.

Still, all the opportunities in the world may not be enough to help the student whose family life is abusive, who sleeps on the street, or who is addicted to drugs or alcohol. This is not a negligible number: New York City School Chancellor Joseph A. Fernandez says 28 babies a day are born to drug-addicted mothers, the equivalent of 365 kindergarten classes a year. Schools are not equipped to solve such problems. But to succeed in their mission, they will increasingly have to help students and their families get the help they need.

In Albuquerque, New Mexico, the New Futures School is tackling the problem of teenage pregnancy. Founded by volunteers 20 years ago in the basement of a YWCA, New Futures combines on-site health and child care, nutrition advice, personalized counseling, and job placement for 500 young women a year. While more than half of teen mothers nationwide drop out, about 75% of those in the New Futures program graduate and go on to jobs or higher education. Honeywell Chairman James Renier was so impressed that he flew two planeloads of Minneapolis–St. Paul city leaders to Albuquerque to see the school firsthand. Convinced, they are now trying to build their own New Futures schools.

Who will pay for such promising reforms? Ideally, all levels of government. But given Bush's no-new-taxes posture, the reality is that state and local governments will have to pick up the check for most of them. That's not necessarily bad. Many governors, like Carruthers, have had the courage to raise taxes. And if New Mexico is a bellwether, voters have grasped a truth that still escapes many politicians: Either America pays now for educational excellence, or it pays more, much more, later. F

THE TEN EDUCATION GOVERNORS

JOHN ASHCROFT (R–Missouri)
By providing tutors for some lagging first-graders, Missouri has dramatically cut the number of children repeating that grade.

TERRY BRANSTAD (R–Iowa)
Branstad is building the first two-way video network so teachers can reach students statewide.

CARROLL CAMPBELL JR. (R–South Carolina)
His partnership with business to improve literacy and job training is the nation's most extensive.

BILL CLINTON (D–Arkansas)
One of America's most articulate reform advocates, he has pioneered new approaches to early childhood development.

GARREY CARRUTHERS (R–New Mexico)
This former economics professor will give New Mexicans an annual report card on the state's 88 districts.

BOOTH GARDNER (D–Washington)
Gardner was one of the first to take a hard look at what students will need to know in the 21st century.

MADELEINE KUNIN (D–Vermont)
Instead of relying on standardized tests, Vermont is pioneering the use of a portfolio of student work to assess math and writing skills.

RAY MABUS (D–Mississippi)
To ensure that children start school ready to learn, the state screens 3-year-olds. Those who need help get it.

RUDY PERPICH (D–Minnesota)
Parents can choose among schools statewide, and high school students can take courses in state colleges.

TOMMY THOMPSON (R–Wisconsin)
Wisconsin is experimenting with choice and with cutting welfare for parents whose children are truants.

How Business Helps Schools

All but 2% of the companies responding to a FORTUNE *poll contribute to education—but some are more committed than others. Want ideas? Read on.* ■ **By Susan E. Kuhn**

BY NOW it is clear: Corporate involvement in public school reform has become serious business. Since the education system has failed to check the erosion of basic skills, companies are proposing increasingly innovative measures to help schools turn out a new generation of workers who can read, write, compute, and think.

Do you buy the argument that remedial education is the automatic answer to dropout prevention? Chevron doesn't. By 1992 it will have given $1.5 million to the Stanford University Accelerated Schools program to expand a project, currently in place in 39 schools, that builds the skills of disadvantaged youngsters by *accelerating* their elementary school studies. Want to *really* make a school partnership work? Cigna not only supplies equipment and employee volunteers to the five Philadelphia schools it has adopted, but also provides management training for school administrators as part of the $1.5 million it has committed over a three-year period ending in 1991. The list of such imaginative programs is growing.

To find out just what America's leading companies are doing to save public schools, and to encourage others by their example, FORTUNE polled all FORTUNE 500 and Service 500 companies. Many of the questions were the same as those posed last year in a longer FORTUNE magazine–Allstate Insurance survey of the same group of corporations. In 1989, 404 companies returned their questionnaires. This year, 305 responded.

Only seven of this year's companies, 2%, do nothing for education, down from 4% in 1989. Though 41% of the companies that participated in the 1990 poll give less than $100,000 annually to public schools, 28% donate from $100,000 to $500,000, and a laudable 18% contribute $1 million or more a year. More impressive, 70% of top executives are now actively involved in their companies' efforts.

The survey asked companies for a brief description of any interesting public school programs in which they are involved. This year's responses were heartening, and rarely brief. The table on the following pages highlights several strategies that 88 of the most involved companies are taking. The directory, which includes some companies not on either FORTUNE 500 list, generally describes only elementary and high school initiatives, although each company is credited with its entire annual financial contribution to education.

WHAT COMPANIES ARE DOING TO HELP PUBLIC EDUCATION*

Contribute money	78%
Offer students summer or part-time jobs	76%
Contribute materials or equipment	64%
Encourage employees to run for school boards	59%
Encourage employees to tutor or teach	50%
Participate in school partnerships	48%
Offer teachers summer jobs	26%
Lobby legislatures for reform	22%
Support tax increases or bond issues	18%
Loan executives to schools	12%

*Figures do not add to 100% as companies were allowed to choose more than one answer.

The biggest benefactors are corporate household names. In its 1989 annual report, International Business Machines mentioned almost casually that it had targeted a hefty $46 million (between 1989 and 1993) toward improving elementary and secondary education. The company is no newcomer to the field—it first declared its commitment to education in the early 1930s—which may explain why it is now the kingpin of corporate givers.

IBM's worldwide contributions to all levels of education in 1988 totaled $81 million, according to the Taft Group, a firm in Rockville, Maryland, that tracks corporate contributions using IRS data, company reports, and matching grants. (Therefore, this figure is higher than IBM's own calculations.) No. 2 in spending on the Taft list is Procter & Gamble, with $19 million, followed closely by General Electric and AT&T, with $18 million each. Rounding out the top ten, with contributions from $16 million to $8 million, are Du Pont, Minnesota Mining & Manufacturing, Shell Oil, Ford Motor, Eastman Kodak, and Boeing.

Where is the money going? Over 80% of the companies in the FORTUNE survey report that they give to colleges or universities. Graduate programs and high schools come next. Last year graduate programs took second place with 57% support, followed closely by high schools with 55%. The order was reversed this year, with 58% of companies contributing to high schools and 52% to grad schools.

That's because as the importance of early

REPORTER ASSOCIATE *Stephanie Losee*

academic intervention becomes better known, the numbers are turning in favor of the lower grades. Over the past few years, IBM and GE have shifted contributions toward elementary and secondary schools, and US West and Texas Instruments are even funding preschool efforts. Mobil, which currently targets an estimated 5% of its current $7 million education budget on kindergarten through 12th grade, may soon increase that percentage by supporting programs that encourage more minorities and women to become science teachers.

The ways in which companies can help American schools—and American students—include contributing money, offering summer jobs to children and teachers, and encouraging employee involvement. While the majority of this year's FORTUNE respondents participate mainly by writing a check, a significant 50% or more report more direct links, with employees serving on school boards or as tutors in classrooms. Nearly half of all companies polled underwrite school partnerships in which corporations adopt one or many schools.

School partnerships are what the partners make of them. Involvement can range from minimal (a Central Fidelity bank in Richmond has run a minibank at Chimborazo Elementary since 1988) to substantial (Cray Research gave $500,000 last year to its 70 school partners in northwest Wisconsin to promote math and science). The National Center for Education Statistics reports that 40% of public schools were involved in partnerships during the 1987-88 school year, up from 17% in 1983-84. Businesses sponsored 70% of all partnerships in 1987-88.

Meanwhile, political efforts to reform public schools—lobbying legislatures for educational change or supporting bond issues—seem to be losing popularity. The 1989 FORTUNE/Allstate survey found that 33% of respondents were pressing for educational change in their states. That number is only 22% this year. In addition, corporate support for educational bond issues has fallen by four percentage points.

Successful educational programs are usually the ones close to home. One true pioneer is Climax Molybdenum, a mining subsidiary of Amax. Concerned about the quality of rural education in its Colorado hometown, Climax formed an advisory committee in 1958 to start student scholarships and teacher training programs. Even when prices for minerals, especially molybdenum, fell sharply in the 1980s and Climax was forced to cut its Colorado payroll from 5,000 employees to 1,000, the support continued. Says Terry Fitzsimmons, an Amax public relations director who started with Climax in the 1950s: "Management could have said that our scholarship programs were just cream, but they didn't. We've been very pleased."

Banks and insurance companies are pros at making the most of neighborhood connections. All 16 Citibank branches in Florida's Dade County have adopted local schools, and through a special fund the bank is giving out cash grants averaging $500 to local educators who devise ways to cut Miami's dropout rate. Connecticut Mutual Life, ITT Hartford Insurance Group, and Phoenix Mutual Life Insurance have all adopted or funded programs at Hartford schools, providing them with everything from a dance floor to summer jobs for students. Approximately 15% of the Phoenix staff in Hartford, for example, each week tutors fourth-, fifth-, and sixth-graders from Fred D. Wish Elementary School in the company cafeteria.

On the theory that good incentives are a good idea, Jostens, the school-ring company in Minneapolis, designed an innovative reward system two years ago for junior high and high school students. Called the Renaissance Program, it encourages students to get high grades in exchange for such perks as reserved parking or exemption from final exams. By September the program will be in effect in 1,000 schools nationwide. Elsewhere, pharmaceutical companies such as Upjohn and Merck are loaning out scientists or opening their corporate labs to teachers for science research projects.

Companies are beginning to look at educational contributions the way they've traditionally regarded research and development costs—as long-term investments. Though 55% of the respondents to this year's FORTUNE poll believe that their educational efforts have made little, if any, impact so far, that number was 75% in the 1989 survey. As in business, companies should look at—and learn from—both the successful programs and those that are not working as well. Top managers should also realize that many, perhaps even most, of their investments in the schools may ultimately pay off. Says Albert Shanker, president of the American Federation of Teachers: "We have hundreds of people struggling to find the same answers. We need a system of sharing and communication." With that in mind, FORTUNE presents the following list.

ANNUAL CORPORATE CONTRIBUTION TO PUBLIC EDUCATION

Under $100,000	41%
$100,000–$499,999	28%
$500,000–$999,999	7%
$1 million–$4,999,999	14%
$5 million or more	4%
No answer	6%

WHERE CORPORATE CONTRIBUTIONS GO*

Preschool	14%
Elementary school	27%
Junior high school	32%
High school	58%
Vocational school	38%
College	81%
Graduate school	52%

*Figures do not add to 100% as companies were allowed to choose more than one answer.

HOW INVOLVED IS TOP MANAGEMENT?

Very involved	32%
Fairly involved	38%
Not too involved	25%
Not at all involved	5%

HAS CORPORATE INVOLVEMENT MADE ANY DIFFERENCE?

Big difference	6%
Fair amount of difference	33%
Not much difference	48%
No difference	7%
No answer	6%

WHERE THE MONEY IS GOING

COMPANY location	ANNUAL CONTRIBUTIONS TO EDUCATION	PROGRAM HIGHLIGHTS
ALLIED-SIGNAL Morristown, New Jersey 201-455-5876	$$$$	**High school partnerships, summer internships for teachers.** Improving science and math skills is top priority at Allied-Signal. The corporate foundation gives grants nationwide; on the local level, it offers summer internships to science teachers through a New Jersey consortium.
AMAX New York City 303-234-9020	$$$	**Teaching fellowships, student scholarships.** In the mountains in Colorado, where Amax subsidiary Climax Molybdenum operates, rural students and teachers have benefited from Climax's interest. Among the many programs: a summer teacher fellowship ($1,000 each to up to 20 recipients) and a doctoral fellowship to train future administrators for rural schools.
AMERICAN EXPRESS New York City 212-640-5660	$$$$	**Academies.** In 1982, American Express launched an innovative Academy of Finance at John Dewey High School in Brooklyn. Designed to prepare urban juniors and seniors for careers through a combination of classroom experience and on-the-job training, the program proved a runaway success. Today several corporations sponsor 35 finance academies across the country. American Express set up an independent National Academy Foundation last year to bring the concept to other industries and to expand such programs worldwide.
AMERICAN TELEPHONE & TELEGRAPH New York City 212-605-6008	$$$$$	**School reform.** AT&T may be a long-distance carrier, but it hasn't lost the local connection. In those cities where AT&T has a major facility, Ma Bell has established an Urban Schools Initiative that focuses on curriculum reform and student achievement. In Phoenix, for example, the foundation sponsors the Hispanic Mother-Daughter program, which selects disadvantaged but potentially successful eighth-grade girls and lets them—and their mothers—visit Arizona State University throughout the school year to see what college is like.
AMOCO Chicago 312-856-5111	$$$$$	**School reform.** Amoco believes in questioning the basics. It is a primary sponsor of the University of Chicago School Mathematics Project, an effort to develop a completely new math curriculum, with materials for students and teachers in grades K-12. The company is also a supporter of the Principal's Scholars program, which prepares minority or disadvantaged students for college studies in business, math, and science.
APPLE COMPUTER Cupertino, California 408-974-2042	$$$$$	**Technology.** Updating that great American tradition of bringing apples to schools, Apple Computer is providing classroom computers nationwide for low-income, minority, and disabled students and to girls studying math and science. It also donates computers to its own Apple Classroom of Tomorrow, a project in five selected schools in various states that is studying the effect of new technology on both teachers and students.
ASHLAND OIL Russell, Kentucky 606-329-3333	$$$$$	**Dropout prevention.** With the average American 13-year-old watching over three hours of television a day, Ashland decided the best way to reach kids was through the flickering screen. Since 1983 the company has run a series of tough-talking TV spots in its Kentucky–West Virginia region encouraging kids to stay in school.
ATLANTIC RICHFIELD Los Angeles 213-486-3511	$$$$	**Student achievement.** When the Bolivian-born math teacher Jaime Escalante proved that Hispanic students in East Los Angeles could excel on an advanced placement examination in calculus, Arco took notice. The result: *Stand and Deliver*, the major motion picture that told his story and that was underwritten by the company. The Arco Foundation continues to support his efforts through a three-year, $150,000 gift to East Los Angeles College, where Escalante directs a summer program that prepares minority high school students for AP exams in calculus and other subjects.
BALTIMORE GAS & ELECTRIC Baltimore 301-234-5631	$$$$	**School partnerships.** BG&E has been blitzing students, parents, and teachers with school reform ideas since 1976. Today employee-mentors coach students in classrooms, workshops teach parents how to support their children's education, and classes help train teachers in good management techniques.
BELL ATLANTIC Philadelphia 703-974-8826	$$$$	**Teacher development.** Take one teacher, add bold new ideas, and presto: You've got a chemical reaction sure to enliven education. Through a three-year, $750,000 grant awarded by the Bell Atlantic Charitable Foundation, the company has joined with the American Association for the Advancement of Science (AAAS) to sponsor a two-week summer skills-enrichment program for some 40 teachers from the Middle Atlantic region.

$ Under $100,000 **$$** $100,000–$499,999 **$$$** $500,000–$999,999 **$$$$** $1 million–$4,999,999 **$$$$$** $5 million or more

COMPANY location	ANNUAL CONTRIBUTIONS TO EDUCATION	PROGRAM HIGHLIGHTS
BELLSOUTH Atlanta 404-249-2390	$$$$	**Adopt-a-school, teacher grants.** BellSouth has built a direct hookup to the future through its subsidiaries, which have adopted more than 100 schools. In addition to encouraging regular involvement of employees as mentors, the company awards mini-grants to schools or individual teachers to fund innovative projects.
BOEING Seattle 206-655-1035	$$$$$	**Partnerships with schools, teacher grants.** Boeing is so serious about the need for a qualified future work force that it assigns company representatives, called education managers, to local schools and school districts where the company has operations. The managers put together partnerships, ranging from individual tutoring to systemwide improvements. Boeing also invites teachers to participate in company management classes.
BURGER KING Miami, Florida 305-378-7096	$$$$	**Academies.** Burger King knows how to get kids' attention. Last fall, in partnership with the Justice Department and Cities in Schools, a national dropout prevention organization, the company established the Burger King Academy program for high school students. Each of the six academies—in Philadelphia, Miami, West Palm Beach, San Antonio, Sacramento, and Long Beach, California—works with up to 125 students, encouraging them to graduate.
CAPITAL CITIES/ABC New York City 212-456-7125	$$$$$	**Literacy.** Cap Cities/ABC is using a powerful weapon in the fight to make literacy alluring: TV stars. The company has teamed with the Public Broadcasting Service to produce Project Literacy U.S., or PLUS. The program features famous faces on the ABC network lauding the joys of reading.
CENTERIOR ENERGY Independence, Ohio 216-447-3232	$$$$	**Teacher development.** Centerior Energy believes as much in building mental pipelines as gas ones. Through its Educational Services Program, the company attempts to add sizzle to science education by underwriting teacher workshops, sponsoring classroom energy projects, and supplying education consultants.
CENTRAL FIDELITY BANKS Richmond 804-782-4000	$	**Adopt-a-school.** On the theory that it is never too soon to know about money, Central Fidelity has opened a minibank in an adopted school, Chimborazo Elementary in Richmond, where students open an account with $25 and make transactions monthly. Most of the accumulated savings are used toward class field trips.
CHAMPION INTERNATIONAL Stamford, Connecticut 203-358-7000	$$$$	**School reform.** Champion has given the public school system of Stamford, Conn., $2 million toward restructuring local middle schools. Plans include creating a math and science magnet school, to open in 1991, and providing more individual attention for students, thanks to added advisers and teachers.
CHASE MANHATTAN CORP. New York City 212-552-9221	$$$$	**Teacher development.** Chase's chief concern is bad writing. By 1993 the company will have contributed $735,000 to fund the Chase/Lehman College Writing and Learning Project. Some 250 teachers in all disciplines are chosen from five New York City junior high schools and trained at a four-week summer program; the idea is to encourage writing in all subjects, including mathematics.
CHEVRON San Francisco 415-894-3800	$$$$$	**Student achievement.** If special enrichment programs work for high achievers, why not try them on students struggling to learn? That's the idea behind Chevron's $1.5 million, three-year grant to the Stanford University Accelerated Schools program. Operating in 39 schools nationwide, the program targets "at risk" children who live in poverty, come from single-parent families, or have limited English skills. Instead of emphasizing remedial work, the program aims to propel them far beyond minimum requirements so that they "catch up" by sixth grade.
CHRYSLER Highland Park, Michigan 313-956-2726	$$$$$	**Literacy.** Not everyone who drives can read a road map—or the simplest instructions. Chrysler hopes to remedy that by building literacy skills early on. Through the Reading Is Fundamental organization, the company has designed a literacy motivation program for first-graders in all cities where plants are located.
CIGNA Philadelphia 215-523-2583	$$$$	**School partnerships.** In the spirit of neighborliness, Cigna has made a three-year, $1.5 million commitment to assist five interrelated Philadelphia schools. The components in the model program include professional training for teachers and educators, as well as new teaching aids and equipment. Cigna has pledged to hire up to 20 graduates annually.

COMPANY location	ANNUAL CONTRIBUTIONS TO EDUCATION	PROGRAM HIGHLIGHTS
CITICORP New York City 312-993-3064	$$$$$	**Dropout prevention, adopt-a-school.** Knowing the neighborhood is a retail banker's business. Few are working the connection better than Citicorp's Florida unit, which is helping the reform effort in the Dade County public schools. Over the past two years the company has spent $60,000 to support the Citicorp Success Fund, a dropout prevention program that provides small cash grants for those who design innovative solutions to the dropout problem. Employees at the bank's 16 local branches host neighborhood meetings with Hispanic teachers and set up partnership activities with local schools.
COLGATE-PALMOLIVE New York City 212-310-3064	$$	**School partnership.** Colgate is sponsoring the restructuring of Wadleigh Junior High School in Harlem, where employees serve as members of advisory boards and provide technical advice.
COCA-COLA Atlanta 404-676-2680	$$$$$	**Dropout prevention.** Staying in school, says Coke, is the real thing—and the company is making sure that potential dropouts get the point. It provides major funding for the Partners for Valued Youth program in San Antonio, which targets Hispanic middle-school children who are at high risk of dropping out. What's unique about the program is that the older children tutor younger children. Both sides add to their skills—and their self-esteem.
CONNECTICUT MUTUAL LIFE INSURANCE Hartford 203-293-5170	$$	**School funding alliance.** Along with school administrators, teachers, and students, Connecticut Mutual employees run a special fund to pay for projects that the Hartford public high school cannot afford. The company endows the fund. In the 1988-89 school year, the alliance designated $15,000 to projects ranging from the construction of a dance floor to the installation of a student mural.
CONSOLIDATED EDISON OF NEW YORK New York City 212-460-4600	$$$	**Dropout prevention, literacy.** Con Ed wants to turn on mental light bulbs. Its primary focus is on students at risk of dropping out. In addition to helping them academically, the company sponsors programs addressing teen pregnancy and substance abuse. In some cases parents as well as their children receive assistance. Con Edison also puts $320,000 toward a Learn to Read literacy program.
CONTINENTAL BANK CORP. Chicago 312-828-2345	$$	**School partnerships.** Continental Bank believes in compound interest. The company became a partner not only with Orr Community Academy in Chicago but also with the ten economically-disadvantaged elementary schools that feed into it. To lower dropout rates, the company developed a parenting skills class and day care center for students with children, and it has worked with early education specialists at DePaul University to create and implement a teaching program based on the everyday use of math.
ADOLPH COORS Golden, Colorado 303-279-6565	$$$$$	**Literacy, child care in schools.** Recognizing that illiteracy often runs in families, Coors has committed $40 million over the next five years to promote the Coors Literacy–Pass It On campaign. The company also spearheaded a drive to provide before- and after-school child care in the elementary schools of Jefferson County, Colorado.
CRAY RESEARCH Minneapolis 612-334-6445	$$$$	**School partnerships.** Cray's interests lean, understandably, toward math and science. Last year it gave $500,000 to its 70 school partners in northwest Wisconsin for math and science initiatives and staff development. Cray also funds and runs Cray Academy, a summer school to help brush up skills of K-12 teachers.
EASTMAN KODAK Rochester, New York 716-724-4408	$$$	**School reform.** Kodak is almost a picture-perfect example of an involved company. On the local front, it has helped drive Rochester's Brainpower program, which coordinates business efforts to improve the city schools. The company has also provided a full-time executive to Brainpower and $300,000 in funding on its own. On the national level, Kodak is underwriting a "stay in school" speaking tour by former NFL star Alan Page. In a related essay contest, called the Kodak/Alan Page Challenge, fourth-graders in nearly 50 cities compete to win tickets to the NFL Pro Bowl.
ENTERGY New Orleans 504-569-4720	$$	**Literacy.** A strong believer in literacy as the most important steppingstone to a better life, Entergy has opened training labs in Arkansas, Louisiana, and Mississippi and promotes them through advertising and an 800 hotline.
EQUITABLE LIFE ASSURANCE New York City 212-554-1101	$$$$	**Student motivation.** This year, Equitable is the lead company in the annual Summer Jobs program sponsored by the New York City Partnership, a business-education collaborative. The program places economically disadvantaged city students in summer jobs ranging from bank clerk to machine operator.

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EXXON New York City 201-765-3004	$$$$$	**School reform, teacher development.** Exxon is no paper tiger in its support of public education. Its Education Foundation, established in 1955, gave over $19 million to educational programs in 1988. In 1987 the foundation created an elementary and secondary school unit, to help teachers cope with an increasingly diverse body of students, to foster more flexible education programs, and to restructure elementary schools.
FEDERAL NATIONAL MORTGAGE ASSOCIATION Washington, D.C. 202-752-7000	$$	**School partnership.** Its acronym may sound hopelessly old-fashioned, but Fannie Mae's drive to encourage kids to graduate is anything but. In 1988 the company committed $1 million over ten years to inspire students at H.D. Woodson High School in inner-city Washington, D.C., to stay in school. Each semester, students whose grades are B or better are invited to enroll in the Futures 500 club; each member gets $500 per semester toward college, as well as a Fannie Mae mentor and a summer internship.
FORD MOTOR Dearborn, Michigan 313-390-7230	$$$$$	**Academies.** True to its manufacturing roots, Ford is leading the way in technical education. A new program, the Ford Academy of Manufacturing Sciences, has been developed in conjunction with the National Academy Foundation pioneered by American Express. To be launched in Novi and Detroit high schools next fall, the program will give juniors and seniors elective courses in manufacturing and technology.
GENERAL ELECTRIC Fairfield, Connecticut 203-373-2211	$$$$	**Encouraging students to go to college.** GE's new College Bound initiative is impressive both in funding—$20 million—and in scope. Launched last year in five schools in Albuquerque, N.M.; Cincinnati; Hendersonville, N.C.; Louisville, Ky.; and Milwaukee, the program aims to double the number of college applicants from selected inner-city schools by the year 2000 through use of vigorous mentoring and tutoring programs.
GENERAL MILLS Minneapolis 612-540-4351	$$	**Creating a magnet elementary school.** General Mills advocates individual attention for students. Accordingly, its General Mills Foundation, in cooperation with the Minneapolis public schools and teacher federation, has established an alternative school for K-6 students. Opened in 1988, the Minneapolis Public School Academy has fewer frills (no music and art specialists) and a lower student-teacher ratio. To encourage parental involvement, General Mills also funded the installation of telephones in classrooms and answering machines in teachers' homes.
GENERAL MOTORS Detroit 313-556-3577	$$$$$	**Student achievement.** General Motors is trying to rev up student interest in science and math by giving an annual grant of $225,000 to Mathcounts, the national mathematics competition for junior high students originally launched by CNA Insurance Cos. in 1983. In addition, GM's Explore the Possibilities program, which includes videos and teacher manuals, attempts to spark interest in engineering and the skilled trades—especially among women and minorities—through case studies.
GLAXO Durham, North Carolina 919-248-2100	$$	**Dropout prevention.** "Be cool, stay in school" is the theme of Glaxo's new program designed to discourage middle-school students in North Carolina from leaving school. Over 10% of its North Carolina work force tutors students in Durham public schools. Kicking off the project is a 31-school speaking tour by James "Bonecrusher" Smith, the only heavyweight boxing champion to have a college degree. Schools will then participate in a creativity contest to reinforce the stay-in-school message.
GTE Stamford, Connecticut 203-965-2828	$$$$$	**Teacher development.** Through its GTE Foundation, the company has focused on science education. The GIFT, or Growth Initiatives for Teachers program, provides selected teams of teachers with $5,000 for professional training and $7,000 for a school-enrichment project. Funding for 1990 totaled $1 million. Another $1 million was allocated to the GTE/PTA early alcohol and drug abuse prevention program, which uses local parent-teacher associations to provide chemical-abuse information to parents of third- to sixth-graders.
HARRIS Melbourne, Florida 407-727-9126	$$$$	**Teacher development.** Want to win a science fair? Move to Brevard County, Harris's home, which since 1980 has had more winners at the International Science Fair competitions than any other school district in the world. Besides sponsoring the district competition, Harris has, for the past eight years, paid for math and science elementary teachers to attend classes at the Florida Institute of Technology.

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HARRIS BANKCORP Chicago 312-461-6660	$$	**Management training for school council members.** Through its aptly named HOPE, or Help Our Public Education program, Harris encourages Chicago employees to run for election to their local school councils. The bank gives employees time off with pay to campaign—and, if elected, to attend council meetings—and trains them in the laws governing school councils.
HASBRO Pawtucket, Rhode Island 212-645-2400	$$$	**School reform.** Reaching kids isn't just fun and games for Hasbro. The company has donated over $1 million over three years to New York's College of Human Services to revamp school curriculums in four elementary schools across the country. The new course of study would involve teaching all subjects simultaneously around a single purpose or theme.
INTERNATIONAL BUSINESS MACHINES Armonk, New York 914-765-1900	$$$$$	**Employees as teachers, community outreach.** Big Blue is a big believer in education, with the funding to prove it: $58 million in 1989. It is equally generous in encouraging employee participation. Among its nationwide initiatives: a faculty loan program, which allows employees to serve full time as teachers or administrators in institutions that focus on the disadvantaged, minorities, women, and the disabled, and a community-service assignments project in which employees work full time with community organizations, including high schools.
INTERNATIONAL PAPER Purchase, New York 914-397-1581	$$$$	**Academic achievement.** Each year, International Paper awards grants to individual schools whose proposals best fit the theme of the year; the theme for 1990-91 is "Learning Through Participation." The current prize pool: $500,000.
ITT HARTFORD INSURANCE GROUP Hartford 203-547-3794	$	**High school work-study.** Going STAG—becoming a member of ITT Hartford's Skills Training Advancement Group—is the hot ticket for local high school juniors. Group members spend a half day working and a half day in the Hartford Education Center in a special summer program. The following September, selected students begin working part-time at Hartford Insurance, which can lead to full-time employment.
JOHN HANCOCK FINANCIAL SERVICES Boston 617-572-5176	$$$	**Student achievement.** John Hancock's five-year-old Heart program—the Hancock Endowment for Academics, Recreation, and Teaching—funds innovative academic and athletic programs in Boston middle schools through a $1 million endowment. To date, 117 programs have been launched with grants totaling $483,000.
JOSTENS Minneapolis 612-830-8429	$$$$	**Student motivation.** The old carrot routine is working in Jostens's two-year-old Renaissance Program, which rewards junior high and high school students who achieve good grades and behave well. Qualifying students are entitled to such privileges as reserved parking, priority registration, free admission to athletic and social events, discounts at the school bookstore, exemption from final exams, and designer clothes. Participating schools report an increase both in attendance and in top grades.
KELLOGG Battle Creek, Michigan 616-961-2000	$$$$$	**Child development, literacy.** Kids aren't just consumers to Kellogg. In September 1989 the Kellogg Foundation donated $3.7 million to the Nation of Tomorrow project at the University of Illinois at Chicago. The project, involving four low-income neighborhoods in Chicago, helps parents learn how to be effective, increases the availability of day care, and expands school health programs. On the national front, Kellogg made a $1.5 million contribution in 1989 to *Reading Rainbow*, a highly praised public television show that motivates young children to read.
LINCOLN NATIONAL Fort Wayne, Indiana 219-455-2000	$$	**Student achievement.** Top juniors in the Fort Wayne high schools spend seven weeks studying applied and theoretical math with employees and other math professionals through Lincoln National's math scholars program.
MARTIN MARIETTA Bethesda, Maryland 301-897-6211	$$$$	**Teacher development.** While other companies focus on students, Martin Marietta is going after the teachers. The company has endowed a $1 million fellowship at the University of Tennessee so that outstanding elementary and high school math and science teachers from throughout the South can attend a special summer program.
MATSUSHITA ELECTRIC CORP. OF AMERICA Secaucus, New Jersey 201-392-4132	$$$$	**School reform.** Matsushita knows a good American investment when it sees one. Through the Panasonic (formerly Matsushita) Foundation, the company underwrites programs in cities big (San Diego and Miami) and small (Santa Fe) that help local teachers improve elementary and high school education.

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MEAD Dayton, Ohio 513-495-3231	$$$$	**Teacher development.** The company will parcel out $500,000 this year in mini-grants to outstanding teachers for innovative classroom projects, as well as to employees involved in schools.
MERCK Rahway, New Jersey 201-594-6353	$$$$$	**Student achievement.** Merck, teachers, and test tubes are proving a heady combination. The company spent $600,000 in 1989 toward revamping science curriculums, updating science education for teachers, and preparing students for careers in the field.
MINNESOTA MINING & MANUFACTURING St. Paul 612-737-3781	$$$$	**Student achievement.** Looking for skilled scientists? Getting to them early is 3M's idea. Through its Visiting Technical Women and Visiting Wizards programs, the company sends employees into Twin Cities area schools to encourage young women—and men—to study science.
MNC FINANCIAL Baltimore 302-453-9930	$$	**Dropout prevention.** You've got to give MBNA America, MNC Financial's MasterCard issuer, credit for putting itself on the line. The company has made a pledge to Gallaher Elementary School in Newark, Delaware, that no child will fail. Through its partnership, the company provides tutoring and counseling—so far 75 employees have volunteered—and has even loaned an executive to run the school's reading program.
MOBIL New York City 212-883-3201	$$$$	**Adopt-a-school.** Although 95% of Mobil's donations currently go to higher education, the company has adopted 15 schools. It has also targeted money toward enticing women and minorities to enter scientific fields.
MONSANTO St. Louis 314-694-4596	$$$$$	**Student achievement.** Monsanto is another corporation that wants to interest minorities in science. The Monsanto Fund has given $500,000 to the University of Missouri at St. Louis toward the so-called Bridge Program, which promotes minority science education in local St. Louis schools. The program includes five-week summer math and science academies, as well as in-school programs and mentors, and college scholarships.
MOTOROLA Schaumburg, Illinois 708-576-2901	$$$$	**Administrator development.** Motorola recently opened its in-house Manager of Managers program to local school superintendents. Participants learn to think creatively, champion change, and make sound business decisions.
NCNB CORP. Charlotte, North Carolina 704-374-5000	$$$$	**School reform.** Ex-Marine Hugh McColl, NCNB's chairman, is looking for a few good men—and women—to lead the South to educational success. The company has donated $1 million to the Southern Regional Education Board to establish a Leadership Academy for teachers, principals, school board members, and others. A second $1 million has been earmarked as prize money for those schools that set performance-based plans—and achieve them.
NYNEX New York City 212-395-2363	$$$$$	**Family education.** New York Telephone provided a $200,000 grant to the New York City Mission Society to educate preschool children and their parents about good work-study habits.
PACIFIC TELESIS GROUP San Francisco 415-394-3000	$$$$	**School reform.** Something of a visionary, the company has committed $2 million over the next five years to its Education for the Future experiment. The six participating schools in the program, scattered throughout California, are expected to define a vision and create a model for the future, complete with restructured curriculums.
PEPSICO Purchase, New York 914-767-7214	$$$$	**Dropout prevention.** Pepsi's million-dollar Pepsi School Challenge program uses a variety of means, from financial incentives to mentor groups, to encourage underprivileged children in inner-city schools not to drop out. Every student who maintains a C average, attends school regularly, and stays drug-free at the first two test-site schools (in Dallas and Detroit) is eligible to become part of the Challenge team, garnering tuition credits and lots of personal support.
PHILIP MORRIS New York City 212-880-5000	$$$$$	**Literacy, minority education.** Philip Morris's educational efforts are as diverse as its tobacco and food businesses. Sample programs: the Philadelphia Mayor's Commission on Literacy, an adult literacy program to which Philip Morris has pledged $1.5 million over three years, and a five-year, $1 million county youth initiative for disadvantaged families in Milwaukee.
PHOENIX MUTUAL LIFE INSURANCE Hartford 203-275-5000	$$	**School health clinics.** Keeping people active and healthy is not only the best life insurance, Phoenix Mutual reasoned, but also the best policy for good school attendance. Accordingly the company committed $72,000 toward the planning and operation of two clinics in Hartford public schools.

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POLAROID Cambridge, Massachusetts 617-577-5073	$$$	**Teacher development, school partnerships.** Polaroid's long-term picture includes emphasis on math and science. The company's Project Bridge pays salary and tuition to employees who want to train for second careers as math and science teachers; separately, the company brings in outstanding educators for one-year stints as Polaroid employees.
PROCTER & GAMBLE Cincinnati 513-983-1100	$$$$$	**School partnership.** P&G's Project Aspire, which encourages students to excel, involves some 150 employees in a partnership with Woodward High School in Cincinnati. Each employee-mentor stays with his student for five years—through the first year after high school. The company also contributed over $400,000 last year to the Cincinnati Education Youth Collaborative, an umbrella program that sponsors, among other things, expanded early childhood education and efforts to increase the number of students attending college and entering the job market with employable skills.
PRUDENTIAL INSURANCE CO. OF AMERICA Newark, New Jersey 201-802-9678	$$$$	**Student enrichment.** As befits its name, Prudential believes in prudence. The company's foundation allocated some $700,000 to secondary-school education initiatives in 1988 targeted at urban and minority youth. Among this year's grants: a mobile pediatric health clinic.
RJR NABISCO HOLDINGS New York City 212-446-5775	$$$$$	**School reform.** The future is now, proclaims RJR Nabisco, which last year endowed a $30 million Next Century Schools fund. The grants will go to risk-taking educators with innovative plans to improve student performance. The first 15 grants, totaling $8.5 million, were awarded this year to programs that, among other things, funded school-based management and curriculum change.
ROCKWELL INTERNATIONAL El Segundo, California 213-647-5311	$$$$$	**Student enrichment.** You can't choose a career if you don't know it exists. Rockwell's 20-year-old project ACT, which stands for advanced career training, is designed to introduce students in Southern California to career possibilities through on-site visits and professional mentoring. So far more than 22,000 students in 33 schools have received academic credit for participating in the program.
SEARS ROEBUCK Chicago 312-875-2500	$$$$$	**School reform.** Sears' major local initiative is the Academic Olympics, a Chicago competition that recognizes and rewards the achievements of "average" students in the public schools. On the national level, Sears is a 20-year supporter of *Mister Rogers' Neighborhood*, a perennial kids' favorite on public television. Working with the American Association of School Administrators, its Allstate subsidiary encourages businesses to help solve local school board problems.
SHELL OIL Houston 713-241-6161	$$$$$	**Academic enrichment.** Shell Oil believes in natural resources—kids as well as fossils. The company foundation has given $2 million to the National Urban Coalition to develop and expand a program focusing on improving the mathematics and science skills of minority and female elementary school students. The Say Yes to a Youngster's Future program also provides summer institutes for elementary math and science teachers and sponsors family math workshops.
SOUTHWESTERN BELL St. Louis 314-235-7060	$$$$	**School reform.** Southwestern Bell is all for radical change. It has pledged $1 million to Re:Learning, a project designed to alter the way secondary schools teach. Analytic and reasoning ability, not conventional memorization, are favored here; schoolwork covers fewer subjects, but in more depth.
SUN Radnor, Pennsylvania 215-293-6286	$$$$	**Literacy program.** To stimulate the reading and writing skills of seventh- to ninth-graders, Sun designed and sponsors a four-week summer live-in literacy camp for 50 students from the suburban Philadelphia Chester-Upland school district. A follow-up mentor program is provided throughout the next school year.
TANDY Fort Worth 817-390-3700	$$$$	**Student scholarships.** Tandy believes there's nothing like financial rewards to pique students' interest. Its Tandy Technology Scholars program, which recognizes excellence in science and math, awarded $350,000 in cash stipends and scholarships this year to 200 students and teachers.
TCF FINANCIAL CORP. Minneapolis 612-370-7057	$$	**Local school partnership.** TCF began a partnership with Henry High School in Minneapolis two years ago and since then has developed ten projects in conjunction with the school. Among the highlights: a Power English literacy program that is required of all ninth-graders and that rewards top students with a savings account as well as money to put in it.

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TEMPLE-INLAND Diboll, Texas 409-829-1313	$$$	**Student scholarships.** A firm believer in community-corporate involvement, Temple-Inland, through its two corporate foundations, awarded $1,000 grants last year to the valedictorians in the 277 public high schools where the company has a major facility.
TENNECO Houston 713-757-2761	$$$$	**School partnership, student scholarships.** Tenneco is also big on local involvement. Its nine-year-old partnership with Houston's Jefferson Davis High School goes far beyond employees' involvement as mentors. One highlight is the Presidential Scholarship program, which provides up to $1,000 per academic year to each student accepted by an accredited college or university.
TEXAS INSTRUMENTS Dallas 214-995-2355	$$$$$	**Early childhood education.** "The earlier the better" is Texas Instruments' motto. The company has donated $288,000 to a model Head Start center for preschool children in Dallas; the money will go, in part, toward a 12-month program (up from nine) and more staff. The company also continues to support a science/engineering magnet school in the Dallas independent school district.
TIME WARNER New York City 212-522-1430	$$$$	**Literacy.** Time Warner, the parent of Fortune's publisher, knows the power of magazines. Its corporate Time to Read program teaches people to read more effectively by using company magazines as resources at 35 sites in 13 states. In 1988-89 nearly 700 volunteers, about half of them employees, tutored over 1,000 students. Other businesses, such as Polaroid and Xerox, also sponsor Time to Read programs.
TIMKEN Canton, Ohio 216-438-3944	$$	**Work-study program.** Timken uses the hands-on approach. Each year minority students with an interest in math and science are recruited for the company's Engineering Awareness Program; they work four hours a week in one of the company's engineering departments and may continue with a full-time summer job.
TRAVELERS Hartford 203-277-4178	$$$$	**Technology.** On the theory that even kindergarten kids can benefit from new technology, Travelers has given a $500,000 grant to the Hartford Early Learning Partnership, a program that encourages early learning through use of computers and hands-on activities.
UNISYS Blue Bell, Pennsylvania 215-986-2867	$$$$	**Technology.** Unisys's major educational thrust is an annual conference for school superintendents at its Epcot facilities in Florida. Last year the 50 superintendents gathered decided to develop new programs aimed at identifying children at risk of dropping out; Unisys also provides hardware, software, and consulting assistance to these model programs.
UPJOHN Kalamazoo, Michigan 616-323-4000	$$$$	**Magnet school.** Upjohn celebrated its 100th anniversary by donating $2 million to build the Kalamazoo Area Mathematics and Science Center. Students from 12 local school districts attend accelerated classes there in math and science and pursue research projects under the guidance of mentors, scientists, and mathematicians from local industry. Upjohn continues to provide help, contributing equipment and encouraging its employees to volunteer.
US WEST Englewood, Colorado 303-793-6578	$$$$$	**Teacher development, early childhood education.** Through its US West Foundation, the company has established a $26 million, five-year effort to support educational excellence. Among the initiatives: an Outstanding Teacher program, in which one teacher from each of the 14 states in the company's service region is selected to receive a $5,000 grant and to compete for a fully paid sabbatical to pursue a particular project. Also under way is US West's Parents as First Teachers program, a three-year, $10 million campaign that brings learning specialists into the home to work with preschool children and their parents.
WELLS FARGO & CO. San Francisco 415-396-5187	$$$	**School reform.** Wells Fargo poured over $200,000 into local schools in 1989; most of the money has gone toward increased parental involvement and school accountability.
WHITMAN Chicago 312-565-3000	$$$$	**Principal recognition.** A primary sponsor of Chicago's Corporate Community School, Whitman awards $5,000 annually to 20 Chicago-area principals it deems outstanding managers.
XEROX Stamford, Connecticut 203-329-8700	$$$$	**Educational research.** Four years ago, Xerox created its Institute for Research on Learning with a $5 million grant. The goal is to explore the use of artificial intelligence in education and to study precisely how children learn in hope of finding the key to more creative teaching.